past; specifically up to 13 on/off cycles earlier. This information can be used to determine the long time retention of the NVM 80 and to take the meter out of service before failure of the NVM 80.

During the Power-Up Routine, as seen in FIG. 4, there is an Oldest (next) Normal Data Field Subroutine for indicating whether the data in the next field in normal fields of data can be read verified. If not, the meter 10 is rendered non-operational.

Specifically, referring to FIG. 6, a block diagram illustrates communication between the postage meter 10, a data center 102 and a service center 104, e.g., via a communications line 106, such as a telephone or a direct data link. As discussed with reference to FIG. 5, if a modify reset flag signal 96 is stored in the service field 98 of the NVM 80, when the meter operator next telephones the data center 102 to obtain the proper reset combination for recharging the meter 10, the presence of the modify reset flag signal 96 is communicated to the data center 102 within the Access Code. The presence of the modify reset flag 96 within the Access Code alerts the data center 102 that the meter 10 has a weak NVM 80. The data center 102 then communicates with the service department 104 to advise it of this condition.

Referring to FIG. 7, the flow chart for the incorporation of Retention Check in the Access Code is illustrated. The Access Code CRC is computed in the meter 10 when the meter operator desires to access the data center 102 for the next reset combination to recharge the meter 10. If the retention check is not okay (retention flag has been set) this flag is appended to the access code indicating a weak NVM 80. If the Retention Check is okay, the modification is bypassed and the Access Code Routine continues to completion. Further details on generating an access code is disclosed in the aforementioned U.S. patent applications: Ser. No. 168,931, entitled, DATA CENTER FOR REMOTE POSTAGE METER RECHARGING SYSTEM HAVING PHYSICALLY SECURE ENCRYPTING APPARATUS, and Ser. No. 168,932, entitled, IMPROVED REMOTE POSTAGE METER RECHARGING SYSTEM.

The indication of a weak memory may be communicated from the data center 102 (FIG. 6) to the service department 104 of the meter manufacturer by hard wire or via a written response. The service man is thus given advance warning to remove the meter 10 for replacement of the weak NVM 80. The funds remaining in the removed meter 10 may be cleared from the descending register by the post office.

It should be apparent to those skilled in the art that various modifications may be made in the present invention without departing from the spirit and scope thereof, as described in the specification and defined in the appended claims.

What is claimed is:

1. An accounting section for an electronic postage meter, comprising:
   a nonvolatile memory having a plurality of normal data fields and a predetermined data field;
   means for exercising said predetermined data field by erasing any data therein and writing a predetermined value therein;
   computer means communicatingly connected to said nonvolatile memory for determining the data retention condition of said predetermined data field during a power-up cycle of the meter by reading said predetermined retention data field on every

power-up cycle of said meter while reading a different one of said normal data fields on each power-up cycle, so that said predetermined retention data field is purposely cycled and degraded faster than said normal data fields;
   means for establishing a constant value;
   means for storing a value which results from a reading of said predetermined data field by said computer means; and
   means for generating a signal when said stored value fails to correspond to said constant value obtained from a reading of said predetermined data field.

2. The electronic postage meter recited in claim 1, wherein:
   the meter has memory means for storing a value;
   said nonvolatile memory stores in said predetermined data field a signal which results from a reading of said nonvolatile memory by said computer means; and
   said computer means is in connection with said memory means and said nonvolatile memory to receive said signal and said value;
   whereby said computer means may compare said signal with said value to determine said data retention condition.

3. The electronic postage meter recited in claim 1, including:
   communicating means for communicating with a data center the presence of a signal generated as a result of reading the predetermined data field of said nonvolatile memory by said computer means.

4. The electronic postage meter recited in claim 1, wherein:
   said computer means reads the oldest data field of said normal data fields during the power-up cycle and generates a signal in the absence of a reading therefrom.

5. A method for determining the data retention condition of a nonvolatile memory in an electronic postage meter which nonvolatile memory has a plurality of data fields, comprising the steps of:
   assigning one of the data fields as a predetermined data field;
   establishing a constant value;
   reading the data in a predetermined data field within the nonvolatile memory during a power-up cycle of the meter while reading of a different one of the other data fields so that the predetermined data field is purposely cycled and degraded faster than the other data fields;
   storing a value which results from the reading of the predetermined data field;
   generating a signal if the value of the data read in the predetermined data field fails to correspond with the constant value, thereby indicating that the nonvolatile memory is weak;
   erasing the data in the predetermined data field subsequent to the reading step; and
   rewriting the constant value in the predetermined data field after the data therein has been erased.

6. The method recited in claim 5, including the steps of:
   storing the signal indicating a weak nonvolatile memory in another data field of the nonvolatile memory.

7. The method recited in claim 5, including the steps of: